OPERATION & TROUBLESHOOTING

Dual Disc II

Azuradisc®
Disc Care & Repair

Ver 4.2

July-01-2012

© 2012 Azuradisc[R] . All rights reserved. Printed in the U.S.A.

SAFETY

When using the Azuradisc Dual Disc II disc repair machine, the following basic safety precautions should always be followed to reduce the risk of fire, electric shock, or injury to persons:

- **Read this manual before assembling or using the machine.**
- **Use this machine only for its intended use as described in this manual.**
- **Use only with Azuradisc-recommended accessories and repair materials. (The use of repair materials not approved by Azuradisc may damage discs permanently or cause injuries.)**
- **Pay close attention when the machine is used near children. The machine is not intended for use by children or infirm persons.**
- **Do not operate the machine if the cord or plug is damaged, is not working properly, has been damaged, or immersed in water. If these conditions are present, return the machine to Azuradisc for examination, repair, or adjustment.**
- **Do not drop or insert objects into any openings.**
- **To disconnect, turn off the machine, then remove plug from the electrical outlet.**
- **Use a grounded plug when using an extension cord.**
- **Keep fingers and all body parts away from moving parts and openings.**
- **Disconnect electrical supply before cleaning.**

© 2012 Azuradisc[R] All rights reserved. Printed in the U.S.A.

This manual may not be copied, in whole or in part, without written consent of Azuradisc. Use of the Azuradisc logo without the prior written consent of Azuradisc may constitute trademark infringement and unfair competition in violation of federal and state laws.

Every effort has been made to ensure that the information in this manual is accurate. Azuradisc is not responsible for printing or clerical errors.

Azuradisc Inc.
7307 South 89th Place
Mesa, Arizona 85212
480.827.8786
www.azuradisc.com

Azuradisc Inc. is not responsible or liable for damage, of any type, to discs inserted into an Azuradisc machine. If you believe that an Azuradisc machine is malfunctioning, discontinue use and contact Azuradisc or an authorized representative.

TABLE OF CONTENTS

SAFETY **2**
OUT OF THE BOX **4**
PART IDENTIFICATION **4**
IMPORTANT INFORMATION **5**
SET UP **6**
BASIC OPERATION **7**
WALKTHROUGH **7**
SELECT TO START **7**
ABOUT REPAIR **7**
POLICOOL LOW & LID OPEN SCREEN: **7**
TROUBLE SHOOTING **9**
INFO MENU **10**
MAINTENANCE **16**
EDUCATION **18**
HOW DISCS ARE MADE **18**
HOW A DVD IS MADE **18**
Single Layer DVDs **18**
Double Layered DVDs **19**
Double Sided DVDs **19**
Double Sided/Double Layered DVDs **19**
IDENTIFYING SCRATCHES **19**
Reading Side Scratches - CDs, CD-ROMs & DVDs **19**
Top Side Scratches **20**
Top Side Foil Dents **20**
AZURADISC ONE-YEAR/100,000 DISC LIMITED WARRANTY **21**
WARRANTY COVERAGE **21**
EXCLUSIONS AND LIMITATIONS **21**
OBTAINING WARRANTY SERVICE **21**

ACCCESSORY CHECK LIST

After unpacking the Dual Disc 2, verify the following items, in the quantities shown, are included. Contact Azuradisc, or the local representative if any items are missing. Place the machine on sturdy surface. Ensure there are no obstructions of air circulation around the bottom and rear of the machine. Ensure that unused cartridges are not stored directly behind the Dual Disc.

1 ea. - Base Plate Assy - 1/8 inch Composite Plate with Velcro attached
Used with the black 1/4 inch Polishing Pad.
Item # **ph_02577_6**

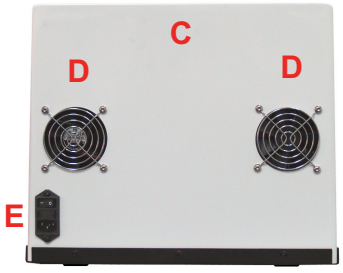
1 ea. - PoliCool™ v3.1 Cartridge Kit
Includes 64oz of PoliCool, and 2 Pads.
Item # **dd_02557_8** (Sold as a Kit)
(Note additional pad(s) or other items may be included as a free samples, quantities and free sample items may change from time to time and are not considered a standard item included with the machine starter kit)

(Combo Item)
1 ea. - Micro-Fiber Wiping Cloths 6x6 - Hand washable and reusable super soft material to clean optical surfaces.
1 ea. - Optical SprayCleaner 2oz.- Laser clear anti-static formula spray cleaner.
Item # **CK 00262 3**
1 ea. - Maintenance Kit - Small Brush and 2 Hex Wrenches.
Item # **CK 00262 3**

1 ea. - Power Cord (Item number varies depending on intended country of use)

1 ea. Scratch Removal Poster
Item # **adv_00222_7**

PART IDENTIFICATION



A Access Door:
- Policool™ Cartridge
- Easy access to PoliCool™ pump
- Easy access to PoliCool™ radiator

B Safety Lid:
- Automatic shut-off when open

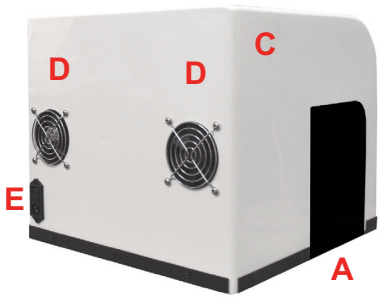
C Fiberglass Casing
- Will not conduct electricity
- Waterproof
- Easy to clean

D Rear mounted cooling fans

E AC recepticle
- Industrial Strength
- Fused
- On/Off Switch

F Electronic Controller

CAUTION!
Make sure there is adequate room for air flow behind and underneath the machine AT ALL TIMES!



Important Information
About PoliCool™ & Smart Tag Technology

What is PoliCool™ ?
PoliCool™ is an advanced formula of micro-abrasives particles, along with a cooling solution and other proprietary ingredients mixed together in a single liquid to provide maximum scratch removal and polishing properties.

Performance
PoliCool™ outperforms polish compounds in both cut rate & finish. PoliCool™ lasts longer than most fixed abrasives. One of the greatest benefits of PoliCool™ is that it can be recycled over and over (with screening) until it has reached the end of its useable life. This creates the benefits of cooling a disc during repair without creating wastewater, or having a complex recirculation system. There is no need to add water, or clean up messy polish compound splatter or dust from the machine similar to those used in "water based" or "dry process" machines. PoliCool™ is automatically recycled back into the cartridge at the end of the cycle.

Usable Life
The performance and life of this product is measured in seconds run time. Different size containers and mixtures contain a smart chip with the information containing the maximum "seconds of run time" per cartridge. If PoliCool™ were used beyond this life, poor performance would result, and disc damage could occur. Since product life is critical to performance, Policool™ is only sold in containers called cartridges that contains a smart chip. This combination greatly improves the repeatability of good results.

About the Smart Tag IMPORTANT MUST READ INFORMATION
Each PoliCool™ cartridge is outfitted with a smart tag that carries the information about the maximum useable life (run time) of each individual cartridge. Azuradisc disc repair machines that use PoliCool™ technology are outfitted with a smart tag reader that reads and transfers the "run time" information from the cartridge to the disc repair machine. Once transferred, the runtime information cannot be transferred back to the PoliCool™ cartridge (smart chip), nor can it be transferred to a different machine. To get maximum life out of each PoliCool™ cartridge, it must be completely used before replacement. Once a cartridge has been mated with a machine (time is transfered from the bottle to the machine), only the machine (not the cartridge) keeps track of the time remanining. This design requires that the same cartridge stays in the same machine to be used until all of the policool time is used-up from the machine. Once a bottle of Policool has been loaded onto a machine (time transfers from the cartridge to the machine) The cartridge itself no longer has time on it, and the smart tag will have a recorded value of "depleted" on the smart tag, and the machine will display the time that was "loaded onto it" Once this process has been complete, it cannot be reversed, and the time that resides on the machine cannot be moved from the machine back to a bottle, or to another machine, it can only be used up through operating the machine, or by purposely erasing the time in a special screen that will ask if you are intending on erasing time. The feature which allows a user to purposefully erase time could come in handy if you spilled all of your policool, and need to load a new bottle. Azuradisc does not provide credits for erased or used time and cannot restore time deleted or depleted.

While it is possible to remove a partially used cartridge from the machine (for transportation or to shake and mix the liquid) it is important that the same cartridge is reinserted in the same machine to be able to use-up the remaining credits.
PLEASE NOTE:

- Inserting a new cartridge in a machine that still has credits left from a previous cartridge may ERASE the original credits left from the previous cartridge and replace them with the credit for the new cartridge, this is rare, and is only possible on software versions earlier than 6.2 that had an automatic approach to loading policool. Loading of policool is now an interactive process, eliminating accidental overwrites.
- Inserting a partially used cartridge in another machine will not transfer any credit.

Azuradisc does not provide refunds or credits for losses due to premature replacement of PoliCool™ cartridges or the improper exchange of cartridges between machines.

SET UP - SUPPLIES - CARTRIDGE & PAD PLACEMENT

To be performed initially and each time you replace the consumables.
IMPORTANT! Always change the abrasive pad when starting a new cartridge. Even if the pad appears to be in good condition visually.

1

Turn PoliCool upside down..Shake vigorously making sure all sediment is mixed.

Load bottle before opening.

2

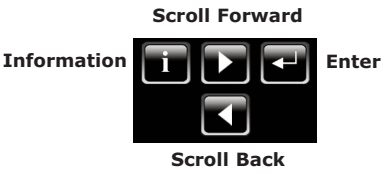
Turn power on. Follow the instructions to load a new bottle of policool. PoilCool Time will appear on the screen, once it has been successfully transfered. 64 oz Bottlesize will show 12,000 seconds. Other size bottles with different time values may be available to purchase.

3

Remove PoliCool Cap and insert the pickup tube (with filter & weight on the end) making sure filter is fully sub-merged. Align bottle opening under drain with color label side facing Smart Tag Reader.

4

Prime lines until PoliCool is flowing and no air bubbles are present. It may take more than one priming sequence to get the liquid flowing all the way through the system.
Press the "i" button, use the arrow buttons to scroll to the prime pump screen.
Pressing the enter button turns on the PoliCool pump for 10 seconds.
Press "i" to stop and return to main screen.



5

Installing a new Pad

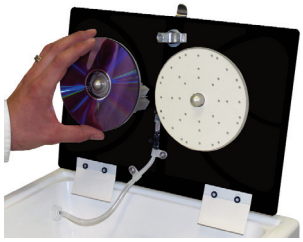
Be sure to REMOVE OLD OR EXISTING BLACK PAD from base spindle before installing a new one.

Verify the base-head has been installed on the unit's turntable hook side up.

Align holes and press the velcro side of the pad on to the base-head.

For Best Results Shake PoliCool™ every 30-45 Minutes of use!

BASIC OPERATION

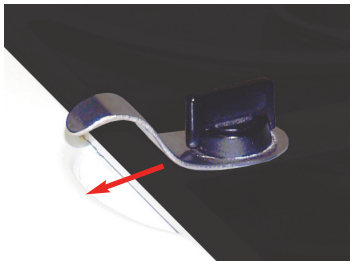


Never operate the machine with only one disc in place

Place CDs or DVDs on both sides. Combining disc types is ok, such as one blu-ray one dvd

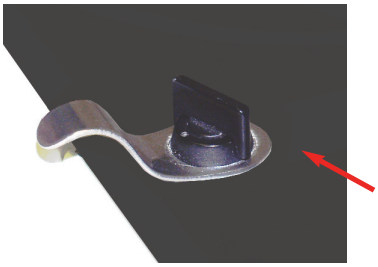
Close the lid, press and turn latch clockwise until it moves passed resistence.

Correct



(Figure 2.1)

Incorrect



(Figure 2.2)

For the lid to be closed the top latch has to be in the configuration shown in Figure 2.1

For the lid to be sealed the edge must be flush with the interior bevel of the cabinet as shown above.

Select Repair Cycle

Number = Length of time in seconds
After pressing selected amount the screen will show time remaining

After repair cycle is finished remove CD's or DVD's from spindles.

Select to start

Select the length of repair and press the corresponding button.

Near the end of the cycle, your discs will be dried by the AutoDry process if the AutoDry feature is turned on.

Press enter to stop process & return to main screen

Number = Length of time in seconds After pressing selected amount the screen will show time remaining

ABOUT THE REPAIR / POLISHING PROCESS - The Dual Disc II uses a single polishing pad & PoliCool™ to remove scratches. Choose the desired level of repair using the indicator buttons. This will vary the total amount of time used in the repair /polishing process. Occassionally a pad may be prematurely damaged or worn out if it is overheated, or damaged by sharp edge scratches on a disc, causing the need to replace the pad before the policool time is used up. It is a good idea to have a spare pad on hand to allow a quick change of the pad, so you may continue to repair discs without interuption.

PoliCool Low Screen

Policool Time is deducted only from actual run time useage.

Erasing or Loading a new cartridge will reset the counter. Once it reaches 1500 seconds the screen will indicate a warning. Once it reaches 0 seconds, the machine will no longer start. Install new cartridge as shown in steps 1 through 5 - SET UP - SUPPLIES - CARTRIDGE & PAD PLACEMENT.

Lid Open Screen

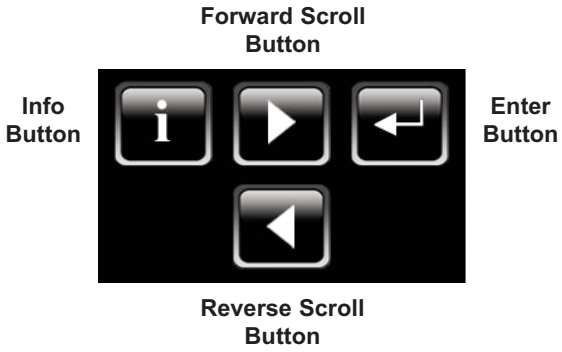
TROUBLESHOOTING

No power	• Verify the power cord is properly inserted in a working outlet; test the outlet with another device. • Check the fuse (by the power connector) on the machine. 110 -230V machines: 15A (1 spare fuse can be found in the AC outlet) • Check On/Off switch is in the “On” position. **Caution:** To avoid electrical shock, ensure the outlet is properly equipped with a ground connection. **Fuse Removal**
Little or No water flow	• Is the hose inserted into the PoliCool™ container? • Are there any kinks in the hose(s)? • Is the pump turning? (try priming pump) • Check and clean filter if needed.
Machine overheating	• Verify the machine is on a flat sturdy surface. A carpeted surface may block the air outlet on the bottom of the machine. • Leave space behind the machine to allow air flow for the cooling fans. • PoliCool™ liquid is not flowing correctly. Verify proper flow of liquid with no air bubbles by using the pump prime feature. Look for constant flow under the lid during the priming process.
Cartridge not reading	• Remove cartridge and reinstall it behind the access door making sure to position cartridge label side in. (step 2) • Make sure that the cartridge is new and that it has not already been inserted in this or another machine and has already transferred its credits. • Test cartridge in test mode (Refer to smart tag test mode)
Not responding to Control Panel	• Power machine down. Turn machine back on and check for display on the front control panel. • Wait for the screen to be on.
Has power but will not run	• Make sure there are no obstructions under the lid and reclose. • Make sure the prime pump sequence has completed, and press the start button again. • Check for indicators on the screen. A new PoliCool™ cartridge may be required. • Make sure controller is displaying main screen.
Preamature wear on the pad	• Never run the machine with one disc. If this happens, the rubber pad from the handle will damage the polish pad which will then have to be replaced. The PoliCool™ will still be useable, but the pad must be replaced with a new one. The handle pad may also need to be replaced if it has been damaged.

INFO MENU

Press “i” from the main screen to get to main info shown at right.

Press “i” at any time to return to the main screen



- **Prime Pump**

  Press the “i” button, use the arrow buttons to scroll to the prime pump screen. Pressing the enter button turns on the policool pump for 10 seconds. Press “i” to stop and return to main screen.

- **PoliCool™ Loads**

  Press the “i” button, use the arrow buttons to scroll to the PoliCool™ Loads screen to see the number of cartridges used. Pressing the enter button activates the screen.

- **Total Runtime Meter**

  Press the “i” button, use the arrow buttons to scroll to the Runtime Meter screen to see the total amount of cycle run time. Pressing the enter button activates the screen.

- **Auto Dry On/Off**

  Press the “i” button, use the arrow buttons to scroll to the auto dry screen. Pressing the Enter Button turns auto dry on or off.

- **Dry Time 1-10 Seconds**

  Pressing the enter button activates (or deactivates) the Auto Dry cycle timer settings. Use the Arrow buttons to amount of dry time.

- **Dry Time 5 Seconds- This is the default setting.**

  Pressing the enter button activates (or deactivates) the Auto Dry cycle timer settings if you need to change the time.

- **Dry Time 7 Seconds**

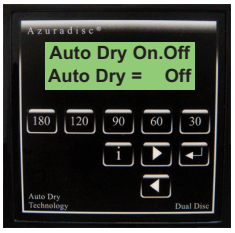
  Set the time to 7 seconds to remove more of the liquid, keep in mind over drying may cause excessive heat and prematurely wear out pads.

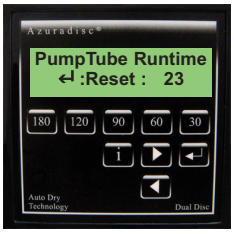
- **Dry Time 10 Seconds**

  Only set the dry time to 10 seconds if you will not be running the machine hard, or if you are using a chiller to cool the policool.

- **Pump Tube Runtime**

  Press the “i” button, use the arrow buttons to scroll to the pump tube runtime screen. Pressing the enter button resets the runtime to “0”.

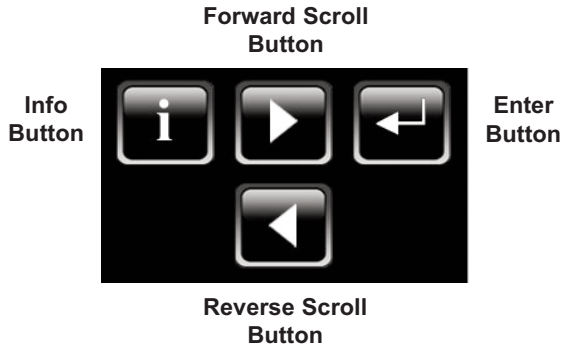




INFO MENU

Press “i” from the main screen to get to main info shown at right.

Press “i” at any time to return to the main screen



- **180 Second Cycle Count**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays recipe tracking.

- **120 Second Cycle Count**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays recipe tracking.

- **90 Second Cycle Count**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays recipe tracking.

- **60 Second Cycle Count**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays recipe tracking.

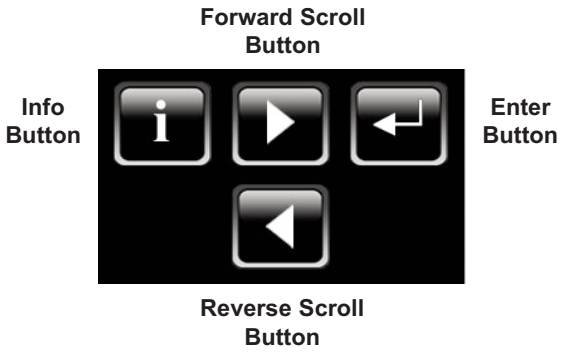
- **30 Second Cycle Count**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays recipe tracking.

INFO MENU

Press “i” from the main screen to get to main info shown at right.

Press “i” at any time to return to the main screen



- **PoliCool Load Screen**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays reload totals.

- **Recipe Count Screen**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays recipe totals.

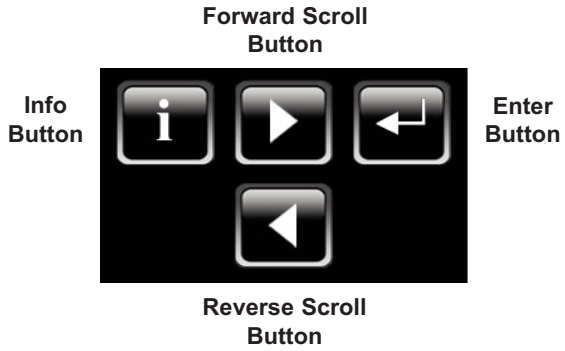
- **Total Runtime in Minutes**

  Press the “i” button, use the arrow buttons to scroll to the count screen. Displays total in minutes.

INFO MENU

Press “i” from the main screen to get to main info shown at right.

Press “i” at any time to return to the main screen



- **PoliCool Time Clear** **WARNING! This permanently erases PoliCool Credits.**

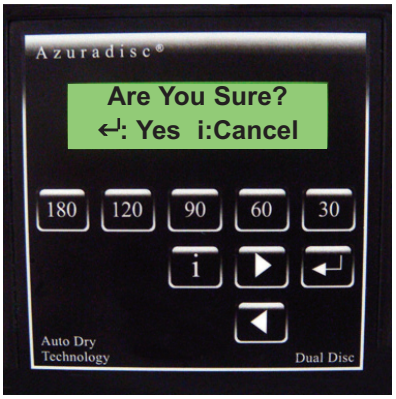
  Press the “i” button, use the arrow buttons to scroll to the PoliCool™ Time Clear screen. Press enter to proceed to confirmation screen.

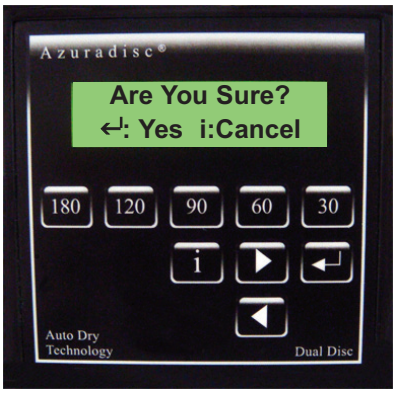
- **Are You Sure?**

  Press the “enter” (yes) to confirm or “i” to cancel.

- **PoliCool Count Clearance**

  Hold the “Enter” button down for 5 seconds to zero out PoliCool™ credits. Use the “i” button to cancel.

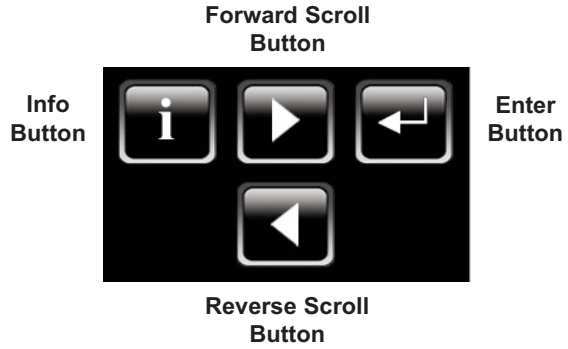




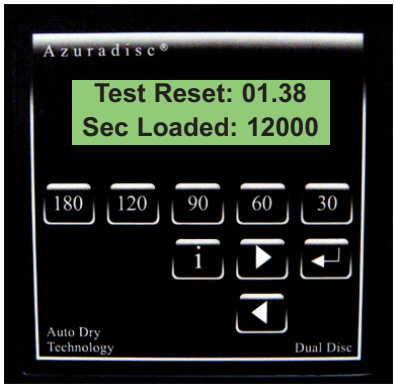
INFO MENU

Press “i” from the main screen to get to main info shown at right.

Press “i” at any time to return to the main screen



• **Test Screen** Press the “i” button, to return to the main screen.
• **Test Screen Smart Tag Loaded**
• **Test Screen Smart Tag Depleted**



Step 1: To start testing, press the enter button. (Figure 3.1) This will take you to the testing screen. To return to the main screen press the “i” button. (Figure 3.2)
When you are at the testing screen you will see a time value.
(Figure 3.2)

(Figure 3.1)

(Figure 3.2)

Step 2: Place the PoliCool™ next to the Smart Tag Reader.
(Figure 4.1)

(Figure 4.1)

Step 3: If the PoliCool™ is valid you will see the amount of credits in seconds. The timer will auto reset after the test is completed to retest, press the enter button again.
(Figure 5.1)

(Figure 5.1)

Step 4: If the PoliCool™ has been depleted you see a message showing you that it is depleted. When the test is complete it will automatically reset the test Screen. (Figure 6.1)

(Figure 6.1)

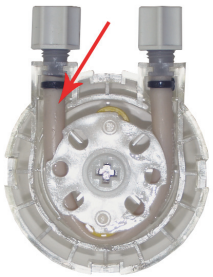
Step 5: If the PoliCool™ Tag is Corrupt (BAD) you will remain on the Test Screen and nothing will occur. The screen will continue to display zero.
(Figure 7.1) Remember if you need to return to the Main Test Screen you can do this by pushing the “i” button.

(Figure 7.1)

MAINTENANCE

CHANGE PUMP TUBE

Step 1:
Turn pump assembly counter clockwise to remove outer cover.

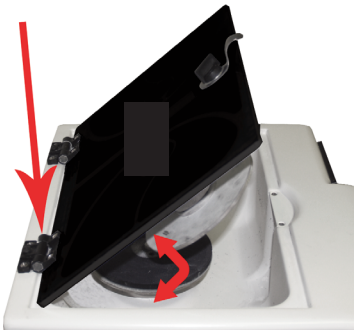


Step 2:
Remove and replace hose.

Step 3:
Align pins and turn pump clockwise to replace outer cover.

LUBE SQUEAKY HINGES

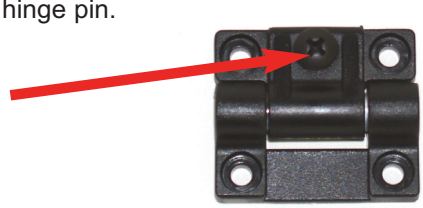
Step 1:
Clean, lubricate or Adjust hinges



Step 2:
Open lid approximately 45 Degrees - Spray Silicone Lubricant on hinge pin.

Step 3:
Tighten center adjustment screws to desired resistance.

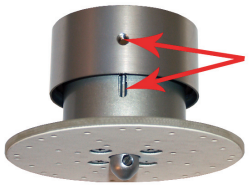
NOTE:
Only loosen or tighten the rear center adjustment screw -
Removing the hinge is irreversible.



LUBE QUICK LOAD SLIDERS VERSION 2

Step 1:
Remove set screw by turning counter clockwise.

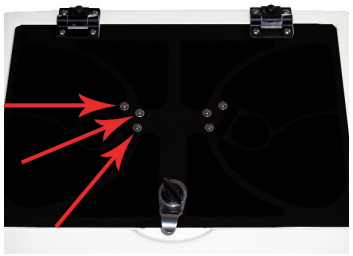
Step 2:
Separate clean, and lightly lubricate rings to assist in reassembly. The Copper colored ring is oil impregnated is self lubricating.



Step 3:
To reassemble, HOLES MUST ALIGN with slot or damage will result during set screw tightening. Do NOT over tighten set screw, this will prevent the mechanism from sliding up and down.

MAINTENANCE

NOTE THIS SECTION APPLIES ONLY TO OLDER MODEL MACHINES THAT HAVE THE ORIGINAL SLIDER VERSION 1 QUICK LOAD ASSEMBLIES. CALL US TO Upgrade to the new lid design.



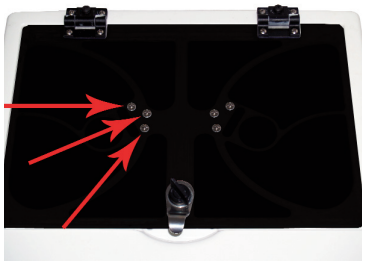
Step 1:
Note: Remove only one side at a time.

Remove the 3 screws that attach the handle to the lid.

Step 2:
Spray Silicone Lubricant on the slide mechanism.

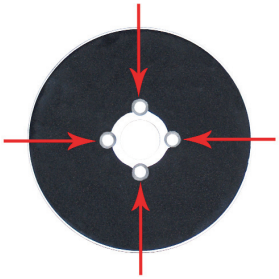
Step 3:
Reinstall the handle mechanism.

REPLACE BEARINGS IN QUICK LOAD SPINNERS VERSION 1

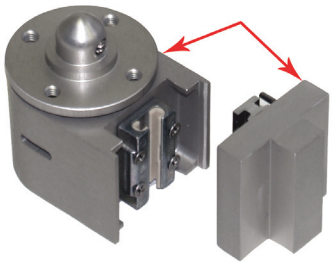


Step 1:
Note: Remove only one side at a time.

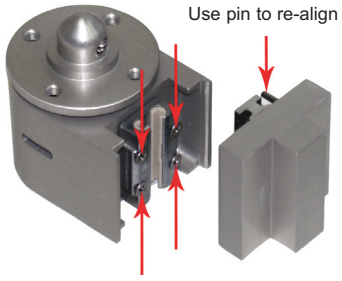
Remove the 3 screws that attach the handle to the lid.



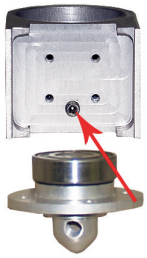
Step 2:
Remove disc plate by extracting the 4 attached screws.



Step 3:
Separate bearing case from “T” block.



Step 4:
Remove slide screws and extract slide from bearing case.



Step 5:
Remove set screw and bearings

Step 6:
To re-Install simply follow steps 5 through 1 (Reverse the instructions)

MAINTENANCE

IMPORTANT MAINTAINENCE HOW TO FLUSH THE FLUID COOLING SYSTEM

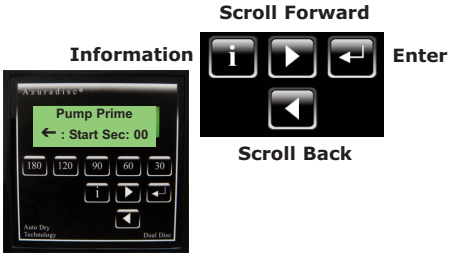
IT IS RECOMMENDED TO FLUSH YOUR COOLING SYSTEM OCCASIONALLY TO PREVENT BUILDUP IN THE RADIATOR AND SUPPLY LINES, OR JUST PRIOR TO STORING THE MACHINE. HI VOLUME USERS WILL NEED TO PERFORM THIS ON MORE REGULAR SCHEDULE DEPENDING VOLUME OF USEAGE.

Step 1:

Begin by gathering 2 clean empty containers. Set the 1st empty container under drain to catch waste fluid and debris.

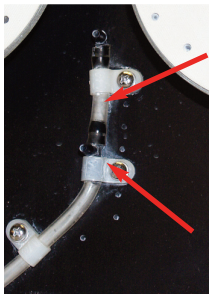
Step 2:

Fill the second container with clean Warm Distilled Water, Do not use boiling hot water for flushing, as this may damage the lines. Place the pickup tube with the filter installed at the end into the container. (clean filter)



Step 3:

Run “Prime Cycle” until fluid runs clear.



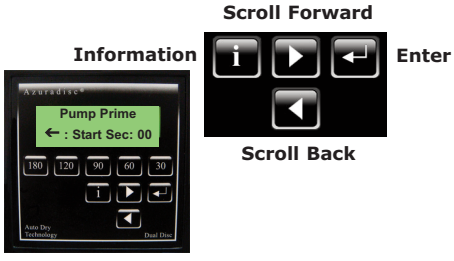
Step 4:

Verify you are getting full flow of clear water out of the nozzles on the lid.

If needed, remove and clean fittings under warm water. If clogged, use a paperclip to clear holes of debris

Step 5:

Remember to run Mixer and “Prime Cycle” when a new PoliCool™ is inserted. (Also run if machine has been left unused for any period of time.)

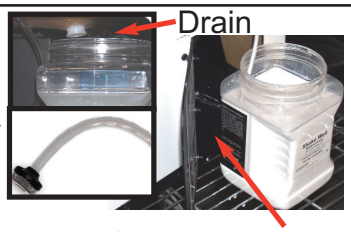


Mix, Prime & Verify Policool flow

1

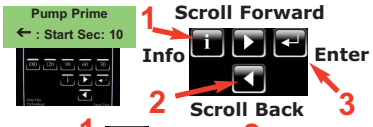
Turn your PoliCool upside down and shake vigorously for a **minimum of 30 seconds** or until mixed completely.

2



Insert tube and filter. Load PoliCool into your Dual Disc II making sure to align under drain

3

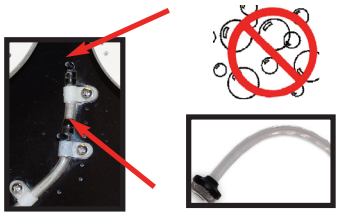


Press the 1 Use the 2 to scroll to the Pump Prime ← : Start Sec: 10 screen.

Pressing the 3 button turns on the PoliCool pump for 10 seconds.

Press the 1 to exit.

4



Verify PoliCool flow at tips and NO air bubbles in the PoliCool lines.

5

Repeat as needed until PoliCool flow is consistent and smooth.

6

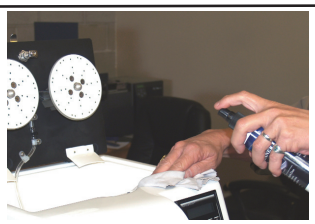
Note the Quick Load Assemblies Are factory locked and will not compress unless unlocked

Clean-up procedure if Pad fails, creating excessive lint or debris

1

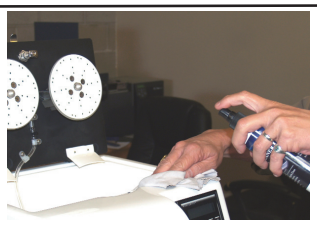
Remove PoliCool from machine.

2



Remove any debris from machine and basin.

3

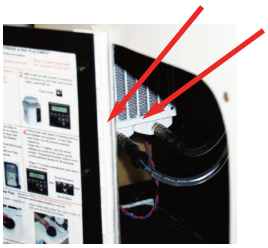


Wipe machine down thoroughly.

4

Clean and flush system completly(sp). See page 18 in User's Manual.

5

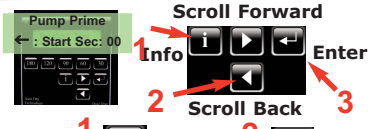


Check hose fittings for obstructions.

6

Verify filter is clean before inserting into a clean bottle of PoliCool.

7

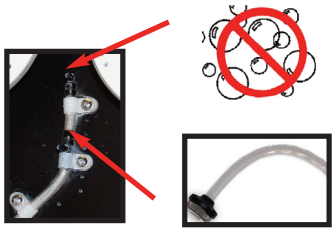


Press the 1 Use the 2 to scroll to the Pump Prime ← : Start Sec: 00 screen.

Pressing the 3 button turns on the PoliCool pump for 60 seconds.

Press the 1 to exit.

8

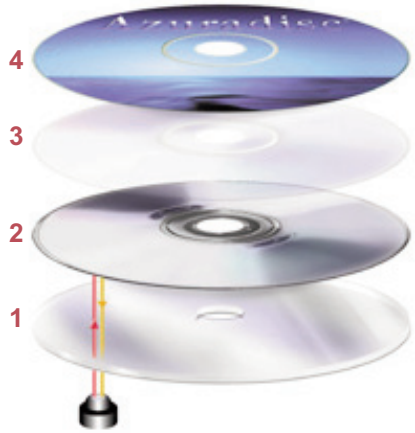


Verify PoliCool flow at tips and NO air bubbles in the PoliCool lines.

EDUCATION

HOW DISCS ARE MADE

CDs consist of 99% clear polycarbonate plastic. The reflective layer, protective layer and screen print comprise the remaining 1% of the disc.

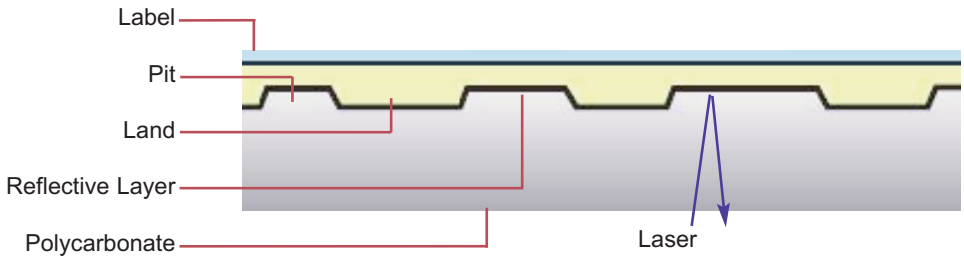


1. A disc is created from molten polycarbonate and digital information is stamped on the top of the disc, while it is still near melting point, using a die with microscopic bumps. These bumps are known as “pits and lands”.
2. After the information is molded into the polycarbonate, a reflective foil layer is applied using a process called sputtering or wet silvering. This layer reflects the laser back to the player, so it’s integrity is extremely important. The layer is usually silver, but can be made of gold or platinum.
3. A clear lacquer coating is applied to seal the reflective layer and prevent oxidation. This layer is very thin and offers little protection from top side scratches.
4. Finally the artwork is screen-printed on the top of the disc.

Pits and Lands are imprinted into the disc to indicate a one or a zero. A laser beam is sent from the player to the disc and the reflective layer reflects it back to the reader and the ones and zeros are translated by the player.

Recordable discs have a photosensitive dye type layer instead of the stamped information layer. This layer, when exposed to a certain light, will make an impression of a pit into the layer.

Re-recordable discs use a layer that allows the laser to polarize the photosensitive layer back and forth between a visible pit to an invisible pit.



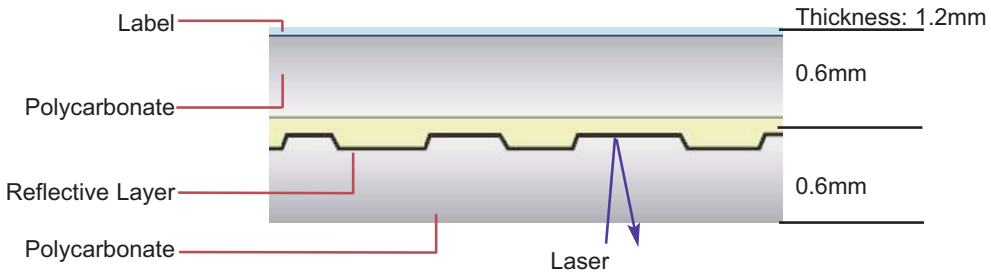
HOW A DVD IS MADE

DVDs are made in different ways depending on the amount of information that is recorded on the disc. DVDs may be single or double layered and single or double layered double sided.

NOTE: DVDs cannot be repaired as many times as CDs because the read side polycarbonate layer is thinner.

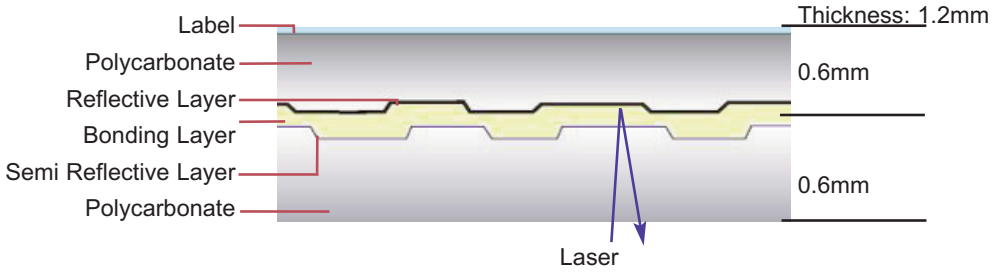
Single Layer DVDs (*DVD-5* - 4.7GB)

These DVDs are made the same way as a CD with one additional polycarbonate layer added between the label and the pits and lands.



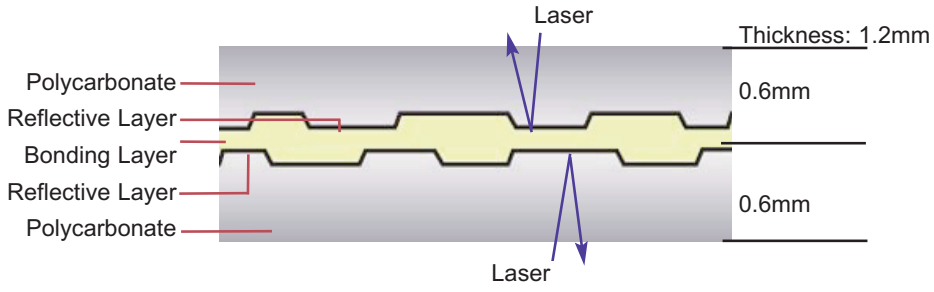
Double Layered DVDs (*DVD-9* - 8.5GB)

Double layered DVDs have a semi reflective layer and a reflective layer giving two layers to store information.



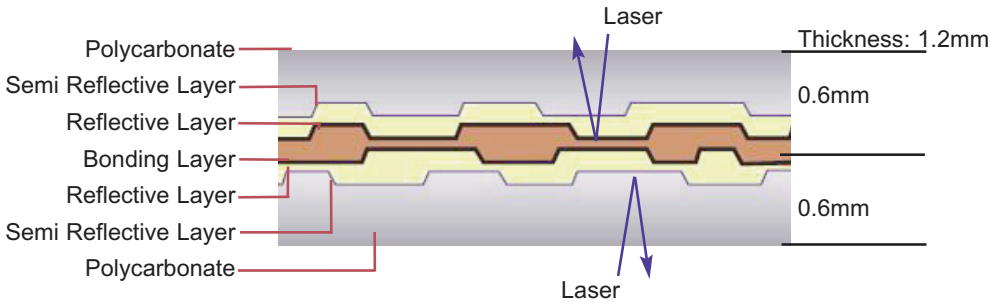
Double Sided DVDs (*DVD-10* - 9.4GB)

Double sided DVDs consist of two discs bonded back to back with the reflective layers in the middle and both sides are repairable. Double sided DVDs require the use of smaller of micro-abrasive polishing papers to prevent the manufacturer's label area from being removed during the repair process.



Double Sided/Double Layered DVDs *(DVD-18 - 17.1GB)*

Double sided/double layered DVDs are simply two double layered discs bonded back to back.



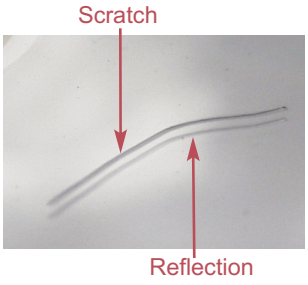
IDENTIFYING SCRATCHES

The three basic types of scratches on CDs are: topside, reading side, and top side foil dents. DVDs are not subject to top side scratches and foil dents as the manufacturing process is different from CDs.

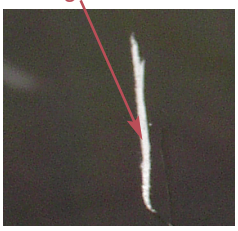
Reading Side Scratches - CDs, CD-ROMs & DVDs

Reading side scratches are the most common type, the easiest to identify, and the only type of scratch that can be repaired.

If the scratch has a double Image, as shown in the figure to the right, it is a reading side scratch and can be repaired by using an Azuradisc scratch repair machine. The double image is the result of the actual scratch and a reflection made by the reflective foil layer.



Top Side Scratches



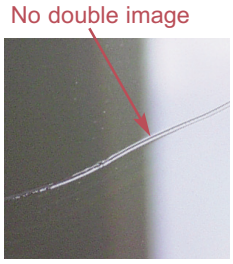
Note: The scratches shown below are not found on DVDs

Top side scratches are caused by a sharp object damaging the top or label side of a disc. In this case, the information just below the printed label area is damaged and causes a skip. Top side scratches cannot be repaired, however they can be prevented by using an Azuradisc Scratch Guard.

The easiest way to identify a top side scratch is to hold the suspected scratch up to a light source and verify that light will pass through the disc in that area.

Note: If light does not pass through, check the reading or bottom side of the disc for a scratch without a "double image". If a double image is not visible, it is a topside foil dent or a top side scratch that did not damage any of the label.

Top Side Foil Dents



Top side foil dents are not scratches but look like a scratch on the reading side of the disc. The dent is made by a large amount of pressure put on the label side of the disc, causing the foil layer to dent. This dent will cause skips and cannot be repaired, however they can be prevented using an Azuradisc Scratch Guard.

The easiest way to identify the top side foil dent is to see if there is a "double image" produced. There should not be a second image because the damage is to the inner foil layer. There may not be any evidence on the label side of the disc because the pressure did not cause any of the label to be removed.

ACCESSORIES VISIT AZURADISC.COM FOR UPDATED LIST

Polishing Pad
Double Sided DVD
with velcro
Replacement pad
(Do **NOT** install until old pad has been removed)
Item # **st2_02579_0**

Base Head Assy.
with velcro
Used with the Polishing Pad
Item # **ph_02577_6**

Reinforced plastic spindles
for in-plant handling and storage of compact discs
Item # **spn_01677_4**

Game Cube Adapter Ring
Fits Dual Disc II & Uno
Item # **gca_02508_0**

WARRANTY COVERAGE

Azuradisc warranty obligations for its products are limited to the terms set forth below:

Azuradisc, Inc. ("Azuradisc") warrants its standard products (the "Warranted Products"), against defects in materials and workmanship for a period ("Warranty Period") defined as follows:

The Warranty Period for disc repair machines and disc testers is a period of one (1) year from the date of original purchase or until 100,000 repairs have been processed using that Warranted Product, whichever comes first. Unless otherwise specified, the Warranty Period applicable to machines and disc testers purchased from Azuradisc as "factory refurbished" products is 6 months or 50,000 repairs, whichever comes first.

The Warranty Period applicable to supplies, normal wear items and replacement machines, assemblies, and parts provided under this Limited Warranty against defects in materials and workmanship is ninety (90) days from their date of delivery by Azuradisc.

Replacement machines, assemblies, and parts, excluding supplies and normal wear items, are also covered for the remaining portion of the original machine's warranty, if that provides longer coverage for you.

If a defect is discovered and a valid claim received by Azuradisc within the Warranty Period, at its option, Azuradisc will (1) repair the Warranted Product using new or refurbished replacement parts, (2) exchange the Warranted Product with one that is new or that has been manufactured from new or serviceable used parts and is at least functionally equivalent to the Warranted Product, or (3) refund the purchase price of the Warranted Product.

When a Warranted Product is exchanged or repaired, any replacement item becomes your property and the replaced item becomes Azuradisc's property. When a refund is given, the Warranted Product becomes Azuradisc's property.

EXCLUSIONS AND LIMITATIONS

This Limited Warranty applies only to the Warranted Products. This Limited Warranty does not apply to any other products, whether or not packaged or sold with the Warranted Products.

This Limited Warranty can be redeemed only by the original purchaser at the original location where Azuradisc shipped the Warranted Product. If you wish to transfer this Limited Warranty, please contact Azuradisc for more information.

Any Software distributed by Azuradisc, whether or not incorporated into the Warranted Products, is not covered under this Limited Warranty. Refer to Azuradisc's Software License Agreement, reviewable at **www.azuradisc.com** or by calling +1.480.827.8786 for more information.

This Limited Warranty does not apply to the following:

- Normal wear or deterioration (follow preventative maintenance schedules to minimize wear and tear on your machine);
- Improper installation or maintenance including but not limited to failure to follow any preventative maintenance schedule;
- Damage caused by accident, abuse, misuse, misapplication, or failure to follow usage directions;
- Warranted Products that have been used with non-Azuradisc products;
- Damage caused by service performed by anyone other than Azuradisc or an Azuradisc-certified service technician;
- A Warranted Product that has been modified without the written permission of Azuradisc;
- If any Azuradisc serial number, date stamp or other marking has been removed or defaced;
- Any item concerning the Warranted Product's appearance that is not due to a defect in material or workmanship.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. AZURADISC SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF AZURADISC CANNOT LAWFULLY DISCLAIM OR EXCLUDE IMPLIED WARRANTIES UNDER APPLICABLE LAW, THEN TO THE EXTENT POSSIBLE ANY CLAIMS UNDER SUCH IMPLIED WARRANTIES SHALL EXPIRE ON EXPIRATION OF THE WARRANTY PERIOD. No Azuradisc reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

IN NO EVENT SHALL AZURADISC BE LIABLE, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT PRODUCT LIABILITY OR OTHERWISE, FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE WARRANTED PRODUCT WITH RESPECT TO WHICH SUCH DAMAGES ARE ASSERTED, PLUS ANY FREIGHT CHARGES ACTUALLY PAID ATTRIBUTABLE TO SUCH WARRANTED PRODUCT, OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL , PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING LOSS OF PROFITS, LOSS OF USE, INTERRUPTION OF BUSINESS, OR ANY COSTS OF RECOVERING OR REPRODUCING ANY PROGRAM OR DATA STORED IN AN OPTICAL DISC, ARISING OUT OF OR IN CONNECTION WITH THE USE OF OR INABILITY TO USE THE WARRANTED PRODUCT OR AZURADISC'S PERFORMANCE OF ITS OBLIGATIONS HEREUNDER, TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.
This Limited Warranty gives you specific legal rights and you may also have other rights that vary from jurisdiction to jurisdiction.

OBTAINING WARRANTY SERVICE

If you have a problem with one of the Warranted Products, **DO NOT SHIP THE PRODUCTS DIRECTLY TO AZURADISC**. Instead, please contact our Technical Support personnel at +1 (480) 827-8786 for a Return Materials Authorization (RMA) number and instructions.

For all warranty service, the Warranted Product must be returned to Azuradisc or an Azuradisc-designated repair center with all transportation and insurance charges prepaid all the way to AZURADISC warehouse. RMA number, dated proof of purchase and whom it was purchased from, as well as an explanation of the problem, must accompany the Warranted Product. You are responsible for any shipping costs, import/export duties, taxes and other such fees.

If Azuradisc determines that some of the necessary repairs are not covered under this Limited Warranty, you may request an estimate and the opportunity to confirm whether you agree to pay for these repairs. If you decline, Azuradisc obligations for that machine or product under this Limited Warranty end.

Azuradisc

7307 South 89th Place
Mesa, Arizona 85212
Phone (480) 827-8786 Fax (480) 827-1104